and developments on SRS station 16.1, highlighting in particular three experiments: firstly, the 20mS time resolved studies of muscle by M.Ferenczi, secondly, the slitted beam work of J.Squire utilising an A3 image plate to record the 59Å reflection of fish muscle and lastly the insect flight muscle work of M.Reedy. M.Lorenzen (ESRF) then described the development of a high pressure cell for use on the micro-focus and high brilliance beamlines at the ESRF, highlighting its use with recent results on tri-block gels. T.Irving (Chicago) rounded up the session by outlining the plans for the BioCAT (Collaborative Access Team) beamline at the Advance Photon Source.

After coffee the poster prizes were awarded. The judges (P.Lindley and G.Zachmann) deliberation was to award a joint first place prize to J.Harford *et al* (Imperial College, London), a cheque for £75, for their poster "Muscle the Movie", and for the second year in succession to M.Elwell (UMIST) for his poster "Simultaneous SAXS/FTIR".
R.Rule (ICI) opened a short session on software by describing the modelling of SAXS patterns of polyurethane utilising correlation functions. He also stressed the importance of error correction, with particular reference to beam intensity measurements and scaler overflow. R.Denny (Daresbury/Imperial College) then described the progress on the CCP13 program suite, outining the developments in the programs FIX, TBACK, LSQINT, SAMPLE and DECONV.

J.Bordas (Liverpool) discussed the effect of the anti-tumor drug, taxol, on the assembly of tubulin as studied by turbidity and SAXS and also the effect of vinblastin as observed by cryoelectron microscopy (EM), highlighting the relationship between EM and

SAXS. C.Blake (Oxford) finished the afternoon with a talk on amyloidosis caused by an aggregation of proteins to form fibrils, as studied by X-ray diffraction, which have been implicated in diseases such as Alzheimers, type II diabetes and BSE. The second day concluded with a sherry reception and conference dinner at Daresbury.

The final day started with M.Reedy discussing his latest work, hot from the beamline, on the time resolved structure of insect flight muscle contraction, complementing this with electron miscroscopy studies. M.Ferenczi (NIMR) described some recent developments in the time resolved x-ray diffraction of single muscle fibres, using stepped length changes with stretch and release and also permeabilised fibres using alpha-toxin. D.Marvin (Cambridge) then outlined the maximum entropy method in the study of Filementous Bacteriophage. The structure is rod like alpha-helix when magnetically aligned, multiple calculations were then performed selecting the best fits. W.Fuller (Keele) showed a video of the instrumentation and results of the development of crystallinity recorded on the micro-focus beamline at the ESRF. The meeting was rounded off with presentations from P.Langan on neutron studies on the D19 beamline at the ILL, S.Perkins (Royal Free Hospital) on the automated curve fitting of SAXS data of multidomain proteins and lastly W.Bras (AMOLF) on the magnetic alignment of microtubules.

The workshop concluded with a special vote of thanks to Val Matthews and Vanessa Porter for all the hard work and organisation that went into making the whole meeting run smoothly.

Geoff Mant

CCP13 and the World Wide Web

The huge growth of the Internet as a mechanism for the rapid dissemination of information has led to the creation of the CCP13 website. The CCP13 home page (Figure 1) is available from the URL:

http://www.dl.ac.uk/CCP/CCP13

The home page currently points to six areas of information, a general introduction, the committee, workshops, newsletters, software and publications. To date, all of the previous workshop abstracts and newsletters have been digitised and converted to WWW viewable documents. We hope that, from this

year on, submissions to the CCP13 workshop and contributions to the newsletters will be submitted electronically.

The latest addition to our pages is the CCP13 license form and program retrieval mechanism (see Figure 2). Basically, all subscribers are requested to enter their name and E-mail address and select the desired program and operating system on which it will run. Selection of the retrieve link on the subsequently displayed page will transfer a compressed executable version of the program to a directory you specify.
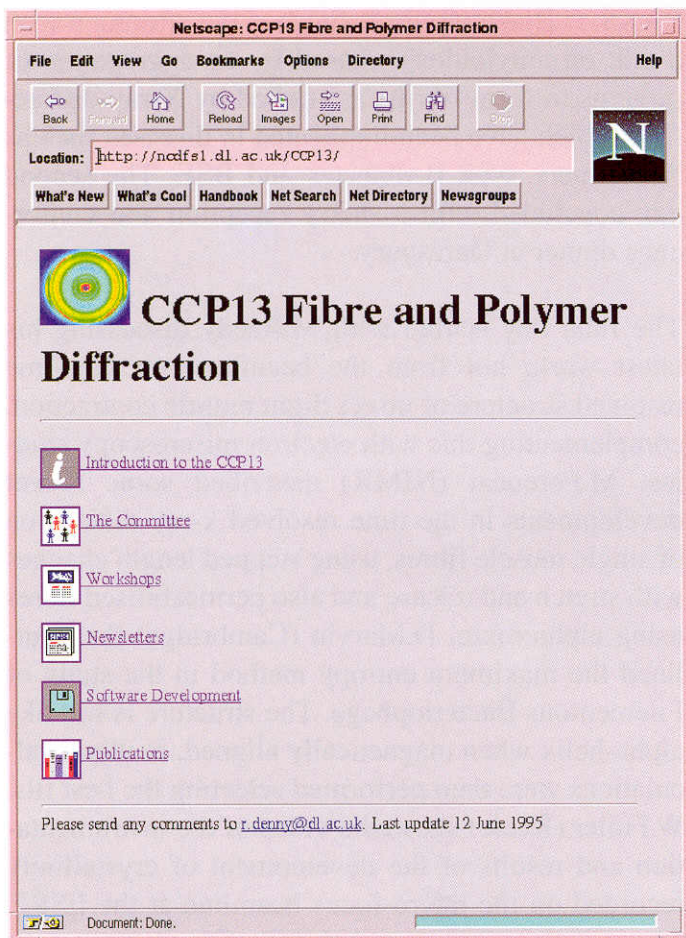
File   Edit   View   Go   Bookmarks   Options   Directory   Help

Back Forward Home Reload Images Open Print Find Stop

Location: http://ncdfs1.dl.ac.uk/CCP13/

What's New What's Cool Handbook Net Search Net Directory Newsgroups

CCP13 Fibre and Polymer Diffraction

- Introduction to the CCP13
- The Committee
- Workshops
- Newsletters
- Software Development
- Publications

Please send any comments to r.denny@dl.ac.uk. Last update 12 June 1995

Document: Done.

Figure 1 The CCP13 WWW home page displayed with the Netscape program.

File   Edit   View   Go   Bookmarks   Options   Directory   Help

Back Forward Home Reload Images Open Print Find Stop

Location: http://ncdfs1.dl.ac.uk/CCP13/request.html

What's New What's Cool Handbook Net Search Net Directory Newsgroups

Licence for use of CCP13 program suite

The Collaborative Computational Project for Fibre Diffraction program executables

are made freely available under the following conditions:

1. The programs should not be passed on to third parties without prior consultation with either the author or the secretary of CCP13.
2. The CCP13 program suite and authors of the programs should be acknowledged in any original publication of results where the programs have been employed.
3. Neither the CCP13 committee or the authors accept any responsibility for errors or consequences resulting from employment of the programs.

E-mail address

Full Name

Operating System   ◇ Solaris 2.4   ◇ Irix5.x   ◇ HP-UX   ◇ IBM-AIX   ◇ Ultrix

Program name   conv

In submitting this form for the CCP13 programs, I accept and agree to abide by the conditions described above.

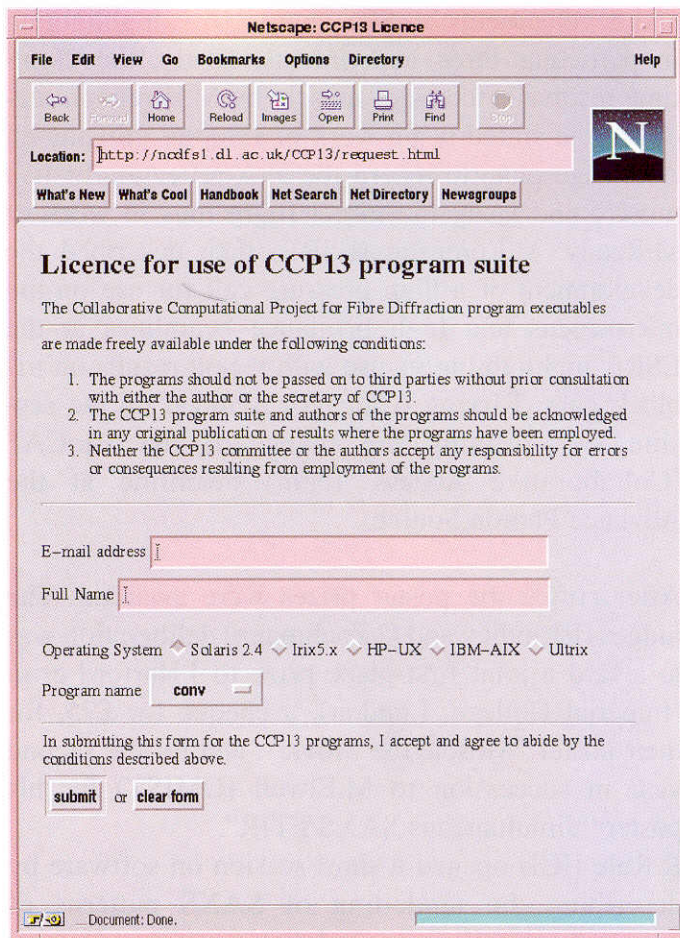submit   or   clear form

Document: Done.

Figure 2 The CCP13 WWW License and program retrieval request form. Look out for three forthcoming forms within the workshop96 index to register yourself for the CCP13 workshop 7-9th May, to submit an abstract and apply for a bursary.

CCP13 Program Updates

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FIX Updates include the use of backing store to restore window contents after exposure events and a refresh command to repaint images where the lines, crosses, etc. drawn by FIX are unwanted. The thresholds for an image can now be modified at any time, not just when the image is first generated. A thickline command has been added for integration of data in rectangular regions in general orientations. The collapsed data which results from the integration can then be fitted in the normal way with the line command (see figure 1). The line fitting routines are now common with those used in FIT so that development will be common to both programs.

FIT Five peak functions are now supported: Gaussian, Lorentzian, Voigt, Pearson VII and the Debye formula for diffraction from chain molecules. Simple lattice constraints can now be enforced on the positions of peaks for tetragonal or hexagonal lattice types where the l index is constant. General cubic indices will be allowed for in the near future. Also, simple limits can be placed on the range of a parameter during refinement. It is also now possible to step through the refinement algorithm, one iteration at a time, changing the value of any parameter when desired. Versions of the routines used in FIT have now been written which utilize PGPLOT line graphics for portability to machines which do not have the GHOST80 graphics library installed. This is an interim measure while a graphical user interface is developed.

LSQINT This program is in genuine need of updating as many modifications have been tacked on for different users. Work is currently in progress to replace the four available profile types with a single,